



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------------|------------------------|
| 10/648,909 | 08/27/2003 | Brian J. Bogdan | 67,108-017;Bogdan 2-1-1-1 | 5062 |
| 26096 7590 12/21/2007 CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009 | | | EXAMINER WOOD, WILLIAM H | |
| | | | ART UNIT 2193 | PAPER NUMBER |
| | | | MAIL DATE 12/21/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/648,909

Applicant(s)

BOGDAN ET AL.

Examiner

William H. Wood

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

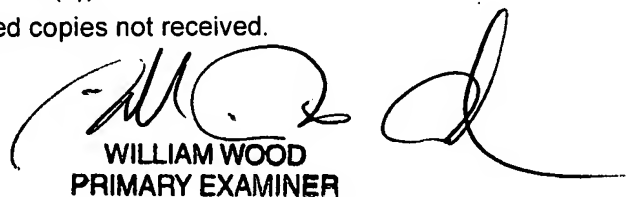
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


WILLIAM WOOD
PRIMARY EXAMINER

DETAILED ACTION

Claims 1-18 are pending and have been examined.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by **Piazza** (US 7,178,141 B2).

Claim 18

Piazza discloses a firmware management system, comprising:

a firmware management tool that assigns a part number to a firmware file when coding in the firmware file is ready to be burned onto a chip such that the firmware file cannot be used to be burned onto a chip if the assigned part number is not associated with the firmware file (*column 3, lines 36-40, "control block" [part number under broadest reasonable interpretation] required for update of firmware; column 10, lines 10-18; column 1, lines 38-48*);

a memory that stores a plurality of firmware files and that is accessible by the firmware management tool (*column 1, lines 15-18; column 7, lines 29-42*);
and

a user interface for accessing the firmware management tool (*column 7, lines 29-42*).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barturen** et al. (US Patent Application Publication 2003/0046681) in view of **Piazza** (USPN 7,178,141).

Claim 1

Barturen disclosed a method of managing a firmware (*page 3, paragraph 0046, encompasses "software" of which firmware is an element*) development process, comprising:

archiving a firmware file containing at least one of firmware source code and firmware object code in an archive (*page 3, paragraph 0046, "source code modules", "binary and executable files"; figure 2, element 215*); and

assigning a status to the firmware file corresponding to a stage in the development process, wherein the status is also stored in the archive (*page 3, paragraph 0046, "to determine at any time the status of a target software system"*).

Barturen did not explicitly state assigning a part number to the firmware file that provides an indication that the firmware file is ready to be burned onto a chip and wherein the firmware file cannot be accessed to be burned onto a chip if the part number is not associated with the firmware file. **Piazza** demonstrated that it was known at the time of invention to require part numbers for firmware (*column 3, lines 36-40, "control block" [part number under*

*broadest reasonable interpretation] required for update of firmware; column 10, lines 10-18) and to burn or write to chips (column 1, lines 38-48). It would have been obvious to one of ordinary skill in the art at the time of invention to implement the firmware archiving system of **Barturen** with assigning “part numbers” to firmware for deployment (that is writing or burning to a chip) as found in **Piazza**’s teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to track changes and ensure compatibility (**Piazza**: column 1, lines 49-52; and column 2, lines 18-20; column 2, line 59 to column 3, line 15).*

Claim 2

Barturen disclosed the method of claim 1, further comprising storing a work history of the firmware file in the archive (*page 3, paragraph 0046, “manages the different releases and version of the software product components during the development cycle and keeps track of their evolution”*).

Claim 6

Barturen did not explicitly state the method of claim 1, wherein the firmware file contains source code and object code, and wherein the method further comprises compressing the source code and object code before the archiving step. **Barturen** demonstrated that it was known at the time of invention to provide compression of files (page 5, paragraph 0084). It would have been

obvious to one of ordinary skill in the art at the time of invention to implement the software management system of **Barturen** with compression of files at various stages including before archival as suggested by **Barturen's** teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make use of a technique to save space.

Claim 7

Barturen disclosed the method of claim 1, further comprising assigning a part number to the firmware file (*page 6, paragraph 0091*).

Claim 8

Barturen disclosed the method of claim 1, further comprising saving edits to the firmware file (*page 3, paragraph 0047, "changes"*).

Claim 9

Barturen disclosed the method of claim 1, further comprising retrieving at least a portion of the firmware file from the archive (*page 5, paragraph 0081, "extracts"*).

Claim 10

Barturen disclosed the method of claim 9, wherein the retrieving step comprises: selecting whether to retrieve the object code or both the object code

and the source code; and retrieving based on the selecting step (*page 8, paragraph 0122, "usually only binary files", not always*).

Claim 11

Barturen disclosed the method of claim 10, wherein the selecting step further comprises restricting retrieval of the source code to at least one authorized user (*page 6, paragraph 0089, teams*).

5. Claims 3-5 and 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barturen** et al. (US Patent Application Publication 2003/0046681) in view of **Piazza** (USPN 7,178,141) in further view of **Mukherjee** et al. (USPN 5,317,729).

Claim 3

Barturen did not explicitly state the method of claim 1, wherein the status is one selected from a private status, a test status, and a public status.

Mukherjee demonstrated that it was known at the time of invention to provide private, test and public statuses (figure 3). It would have been obvious to one of ordinary skill in the art at the time of invention to implement the software management system of **Barturen** with various statuses as found in **Mukherjee's** teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make use of a long

existing and therefore readily available mechanism for version control (*column 1, lines 5-11*), which is the purpose of **Barturen**.

Claim 4

Barturen and **Mukherjee** disclosed the method of claim 3, wherein the private status corresponds to a design stage in the development process, the test status corresponds to a reviewing stage, and the public status corresponds to a manufacturing stage (**Mukherjee**: *column 1, lines 45-55*).

Claim 5

Barturen and **Mukherjee** disclosed the method of claim 3, wherein at least one of the private status and the test status restricts access to the firmware file to at least one authorized user (**Barturen**: *page 6, paragraph 0089, teams*).

Allowable Subject Matter

Claims 12-17 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or suggest the claimed invention. Specifically, the prior art of record fails to teach or suggest "assigning a status ..."; wherein the status is also stored in the archive ... wherein assigning the public status includes assigning a part number ...", as recited in independent claim 12.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

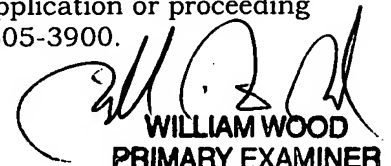
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 10:00am - 4:00pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)-272-3756. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR systems, see <http://pair-direct.uspto.gov>. For questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.


WILLIAM WOOD
PRIMARY EXAMINER
William H. Wood
Patent Examiner
AU 2193
December 19, 2007